

Testimony of William W. Beach  
Director, Center for Data Analysis  
The Heritage Foundation

Before the Committee on the Budget  
House of Representatives

June 20, 2001

The current energy problems in the Western and New England states, particularly California and New York, stem from a combination of federal and state policy failures and higher foreign oil prices. While the low supplies of gasoline and the prices of electrical power that brought these problems to national attention have begun to improve, the underlying policy challenges remain. U.S. consumers of gasoline and electricity need more domestically produced supply, and federal energy policy needs now to be redirected to producing wide-ranging increases in supply.

The President's energy plan shows great promise on this crucial redirection towards greater supply. The plan achieves greater energy production by prudently altering the schedule for attaining certain emission goals at power generating and refining facilities, encouraging conservation, developing alternative energy sources, encouraging gas and petroleum exploration, and supporting efforts to achieve more energy efficient homes and office buildings. Indeed, the plan may be faulted for doing too much, not too little. It dramatically changes the course of energy neglect and bad practices by state and federal governments over the past ten years.

If Congress enacts key components of the President's plan, long-term prices for electricity and gasoline (as well as natural gas and coal) will likely be lower than currently forecasted. The economic benefits of generally lower energy prices are widely shared throughout the economy in the form of higher productivity, higher real wages, and greater levels of economic output than would otherwise result from generally higher energy prices. Indeed, just as especially high petroleum prices almost always lead to sharp economic slowdowns in the United States, lower than expected energy prices almost always support improved economic performance.

It is commonly known that the surplus (or, technically, the net deficit) of the federal government is intimately tied to long-term economic performance. Any set of events or policy changes that puts the U.S. economy on a higher growth path usually results in improved financial performance. Tax cuts have this effect and so do sustained reductions in energy prices.

I used the WEFA Macroeconomic Model to illustrate the economic and financial effects of a modest decline in energy prices, in this case a ten percent reduction in crude oil prices beginning in the fourth quarter of this year through the end of 2011. While many in Congress and certainly the President have in mind much more aggressive energy

solutions than the one I've chose here, what is true of this small change will hold for those envisioned in the more global plans.

The WEFA Macroeconomic Model is well suited for this simulation. Besides being one of the oldest and most widely respected models of the U.S. economy, it is in extensive use in Fortune 500 companies and throughout the federal government. The Heritage Foundation has been using the WEFA model for the past four years to perform simulations of major policy changes.

In preparing this simulation, no other changes were made to the model. In other words, I did not assume that the labor force would grow as non-workers decided to take advantage of increased economic activity to enter the labor force. Nor did I assume that borrowing costs would be lower than predicted by the model itself. It actually is quite common for economists to make these assumptions, and both of these changes to the model would have significantly improved the results. In other words, I allowed the model to calculate the effects of the one change I did impose on the equations: a ten percent drop in petroleum prices.

This economic model indicates the following probable effects if crude oil prices decline by ten percent beginning in the fourth quarter of 2001:

- Inflation adjusted Gross Domestic Product rises by an average of \$52 billion dollars per year between 2001 and 2011, or by about one-half of a percentage point. The near-term economic growth rate rises by .3 percent.

Chart 1 shows the pattern of forecasted GDP growth following the price decline. Output jumps by nearly \$30 billion above baseline in the first year before doubling by the end of the third year following the initial price drop. The sustained patter of above-baseline forecasts indicates that the energy price decline had a significant effect on economic productive.

- The decline in oil prices produces an average of 173,000 more jobs per year. The increased productivity of the economy accommodates these new jobs, and the unemployment rates drops consistently below a forecast with higher oil prices.

Chart 2 shows the employment side of the output growth. The civilian labor force increases by a small amount the first six months following the price decline (about 2,000 jobs) before bounding up to 205,000 new jobs above baseline at the end of the second year. Productivity gains keep the unemployment rate below the baseline forecast throughout the 10-year period.

- As Chart 3 shows, fixed investment adjusted for inflation increases by a total of \$202 billion over the ten-year period, and the annual rate of investment is nearly one percent higher than baseline.

One important reason for the growth in fixed investment (investment in plant and equipment) is the forecasted lower cost of capital. Chart 4 shows the pattern of capital cost changes. At the end of the period, the user cost of capital is about 70 basis points below baseline.

- The effect of greater economic activity modestly increases federal revenues and produces significantly lower expenditures.

As Chart 5 shows, lower energy costs reduces federal outlays. Some observers of the federal budget process need to be reminded that the surplus frequently changes for non-revenue reasons. The enormous attention paid to tax policy change over the past several months likely has obscured the fact that the general fund surplus is affected by changes in outlays more often than it is affected by revenue variation.

Our analysis indicates that this small change in petroleum prices would produce a total of about \$100 billion in outlay savings to the federal government over this 10-year period.

The reduction in energy prices results in a modest drop in inflation. While this decrease in the CPI affects the budget positively, it results in small decreases in revenues when compared with baseline.

- As Chart 6 shows, the net effect of revenue and outlay changes adds a total of \$76 billion to unified budget surpluses over this ten-year period, of which the greatest part is attributable to the general fund.

Considering that the crude oil policy changes (largely enhanced U.S. exploration and drilling combined with foreign policy moves toward OPEC) constitutes a small portion of the President's plan, it is doubtless safe to assert that the results of a comprehensive modeling of this initiative will show much larger budget results. That modeling effort now is underway in the Center for Data Analysis.